

Chapter 4 Quiz 1 Study Guide

Lessons 4-1 through 4-4

Lesson 4-1- Divisibility and Mental Math- Circle all numbers that each given number is **divisible** by. Use divisibility rules.

Number	Divisible by....
4,590	2 3 5 6 9 10
896	2 3 5 6 9 10
945	2 3 5 6 9 10

Lesson 4-2- Exponents

Simplify each expression. Show your work step by step.

3) $2^4 + 5^2 + 106$	4) $(4^2 - 4) \times 10$	5) $4 + 7 \times 2^3$
----------------------	--------------------------	-----------------------

Lesson 4-3- Prime Numbers and Prime Factorization- Find the **Prime Factorization** of each number using a factor tree or a birthday cake. Write your final answer using exponents if possible.

7)	58	8)	72	9)	40
----	----	----	----	----	----

Lesson 4-4 Greatest Common Factor- Use a **division ladder** or **factor trees** to find the GCF of each set of numbers.

10) 32, 24 and 40	11) 56 and 35	12) 27 and 36
--------------------------	----------------------	----------------------

Squares and Square Roots- Try to complete the following to the best of your ability **without** looking at your flash cards. If you really want to test yourself- time yourself to try to get it all done in **2 minutes**.

2^2		$\sqrt{196}$	
4^2		$\sqrt{225}$	
6^2		$\sqrt{16}$	
7^2		$\sqrt{4}$	
3^2		$\sqrt{9}$	
12^2		$\sqrt{121}$	
11^2		$\sqrt{144}$	
5^2		$\sqrt{25}$	
8^2		$\sqrt{81}$	
9^2		$\sqrt{64}$	
13^2		$\sqrt{100}$	
10^2		$\sqrt{49}$	
15^2		$\sqrt{36}$	
14^2		$\sqrt{169}$	